White Pond Advisory Committee

White Pond People Management Plan and BFRT Impact January 29, 2008

Context of This Report

This document is intended to:

- 1. Provide recommendations to the Selectmen and the Bruce Freeman Rail Trail Advisory Committee (BFRTAC) regarding issues around White Pond,
- 2. Make the Selectmen aware of the magnitude of the current ongoing efforts to maintain the area as a resource for the Town, and
- 3. Where possible, attempt to quantify initial and on-going real expenses the town will need to anticipate and budget for related to the BFRT's passage through the White Pond area.

These are the recommendations of the White Pond Advisory Committee with significant input from individual members of the Friends of White Pond, White Pond Association, Inc, Old Pickard Farms Trust II (the Stone Root Lane trust), members of the BFRTAC who live in this area, the Concord Police Department, and the Division of Natural Resources. Those organizations may choose to endorse some or all of the recommendations in this document.

Executive Summary

The Bruce Freeman Rail Trail will increase the flow of visitors to the Town, and destinations along the trail, including White Pond. This must be matched by an increase in the efforts to promote the proper use of these areas and surroundings.

There are several main reasons why the problems at White Pond are somewhat contained:

- 1) People don't know about the pond,
- 2) Parking is limited or inconvenient, and
- 3) White Pond Association and private landowners, with assistance from the Town, attempt bank erosion repair on regular basis.

The BFRT will create opportunities for exposure to White Pond that do not currently exist. Thousands more people will become aware of a pond that appears to be accessible to casual swimmers, and the trail will provide access to its very shore. In many ways, White Pond's people management needs will likely mirror those at Walden Pond, and we can learn a great deal from their successes and failures.

Potential Financial Impact: It is important that the Town recognizes – and commits to funding – the cost of protecting existing Town resources when planning for expenditures on new resources. Funding for the cost of enforcing this protection, with the increased number of visitors to the rail trail, must be anticipated, understood, committed to for the long term, and budgeted for as part of the Town's approval of the trail. We estimate that

the cost to implement these recommendations would include initial costs of \$100k for fencing, \$100k for erosion and landscape repair, and \$20k for reservation land trail enhancements (improved reservation trail markings, wooden stair access from rail bed). Ongoing annual costs are estimated at approximately \$125k per year, including the cost of one additional police officer (\$80k - \$100k), doubling the ranger program (+\$15k), fully funding an expanded water quality testing initiative (\$5k), and \$(25k) for fence, landscape, and trail maintenance each spring and fall.

We recommend that the following be considered in the design and planning for the Bruce Freeman Rail Trail in Concord:

- Fencing and other means (signage) to reduce access to Old Pickard Trust II land
- No rest stop near White Pond
- Formalize access from the rail trail to the to the White Pond Reservation trails in order to discourage trespass over private property
- No parking near the trail on Powder Mill Road
- No formalized entrance at Powder Mill Road due to safety concerns
- Minimize environmental impact of construction and trail design
- Budget for increased Ranger and Police visits to encourage proper use of the White Pond area

The Town's current efforts at White Pond and in other conservation lands are a good start but will be overwhelmed with the large increase in visitor populations expected as the rail trail popularity increases. Changing visitor behaviors to the pond and conservation areas will require time and education. During the next few years, before the Rail Trail is built, the town, the WPAC and the community need to take additional steps to strengthen the proper use of the White Pond Reservation:

- Enforce existing parking regulations
- Fund additional water quality testing
- Improve signage to reduce illegal swimming, consider swimming badges to help fund increased patrols and ease illegal swimming enforcement
- Improve maintenance and signage of hiking trails
- No dogs in water, no bicycle riding on White Pond Reservation/Town Land trails.
- Informational Brochure about White Pond features and rules
- Using lessons learned from Walden Pond Keep reservation land management and erosion repair up to date to discourage further trespass and damage.
 Understand "carrying capacity" issues and explore ways to limit the visitor population at times of overuse.

Users of the Pond Area

White Pond provides recreational opportunities for thousands of people, both non-residents and residents of Concord.

- **Boating**: Boats with electric motors are allowed and used primarily by fishermen. Canoes, kayaks, sailboards, and inflatable boats of unlimited variety are commonly seen on the pond.
- **Fishing**: The stocking of the pond with rainbow and brown trout by the State's Department of Wildlife and Fisheries along with a healthy population of bass results in the pond being of great interest to fishermen. There are fishermen on the pond or along the shore throughout the year.
- Trails: There are trails to the south and west of the pond on both Town-owned land and private land, which are used for hiking, horseback riding, cross-country skiing, and similar activities.
- **Swimming**: The White Pond Association operates a seasonal swimming area for approximately 550 families. Swimming is also permitted for the 33 homes abutting the pond and a large portion of the 62 homes in the pond watershed via private deeded access points.

Threats to the Pond Area

There are well-known problems that threaten the health of the White Pond area.

Water Quality

The water quality of White Pond is very fragile. Surface runoff and septic systems are a major source of degradation. Erosion, fertilizers, and overuse by swimmers and shoreline visitors also contribute to the degradation of water quality.

Erosion of Banks

Erosion and uncontrolled surface run-off seriously degrade the pond's water quality by introducing nutrients and debris into the pond. Tree cutting and unregulated changes in vegetation near the shoreline can increase erosion and uncontrolled surface runoff. This in turn leads to loss of plant diversity and animal habitat, as well as diminishes the natural beauty of the shoreline.

Litter and Vandalism

Most pond visitors are well-behaved. Nevertheless, fires are a problem, litter is a common sight, and there are periodic episodes of vandalism (defacing signs, destruction of trail management ropes, moving or destroying the bales used for erosion protection) both on the private beach, the town trails and private trust land.

Noise and Disturbing Private Property

There is also an impact on the property owners near the pond. This includes noise, night use, parked cars that block access, trespassing to access pond, campfires, nighttime "teen activity" including fireworks, alcohol and litter.

Old Pickard Trust II Access

Residents of Stone Root Lane have deeded right-of-way across the rail bed to their property on the shore of White Pond which must be preserved. In addition, the general public must be kept off their property.

Additional information on these issues can be found in the White Pond People Management Plan 05/30/2006, and the White Pond Reservation and Conservation Land Management Plan, 12/06/2002. Both documents can be accessed on the Town website www.concordma.gov/boards/wpac.

Assumptions about the BFRT

At the time of this writing, we do not have details about design features of the Rail Trail, or estimated utilization. We have made the following assumptions about the trail:

- The trail will end at Powder Mill Road until Sudbury is ready to proceed.
- The trail will be completed past White Pond no earlier than the summer of 2011.
- The trail, when opened past White Pond, will continue through Sudbury at least to the parking lot at the ball fields at Morse Road.
- Public parking is available in Concord at West Concord Center, at the Old Rifle Range, and along Old Marlboro Road.
- Public parking will be available in Sudbury at Davis Field at such time that Sudbury constructs their section.
- There will be an access ramp from Powder Mill Road, on the either the northwest or northeast side.
- The nearest rest room to the north will be in West Concord Center.
- The nearest rest room to the south will be in Sudbury at the ball fields at Morse Road.
- The trail will be publicized outside of Concord (that is, we expect a large number of the rail trail users to be from out-of-town).
- Estimated 100,000-150,000 bike or foot trips per year past White Pond when the trail is completed to Sudbury. Current traffic on the rail bed is 3,000 trips per year (10 people a day, 365 days a year) mostly by repeat visitors who are local residents.
- Many first-time visitors using the BFRT will return to the area to take advantage
 of swimming, boating, fishing, cross country skiing, hiking opportunities they
 envision when seeing this pond for the first time.

Recommendations

Fencing for Old Pickard Trust II Conservation Land

The entire stretch of the rail trail with a view of White Pond is along the private property of the Old Pickard Farm Trust II. This area is also within a Natural Heritage priority habitat. The owners are concerned about trail users picnicking, trespassing, littering, and crossing their property to get to the pond, falling down the banks, destroying vegetation, eroding the banks, and using their private beachfront. There has already been a high level of illegal use. Currently there are no fences or markings except for three or four "No Trespassing" signs which are subject to frequent vandalism.

We recommend that the BFRT construction include a split rail fence, combined with natural plantings between the fence and the pond, as a deterrent to trespassing. This type of fence will allow the passage of animals, and it will be attractive from the Pond and from the trail. There is a steep drop-off from the rail trail along this section, and this fencing should be designed to eliminate the need for an additional guard rail. The fence should be built on the railroad right-of-way, as close to the actual path as possible (i.e., not at the edges of the right-of-way)

The fencing should begin at the Powder Mill Road culvert/tunnel to deter access down the south slope from Powder Mill Road, and continue along the pond side of the rail trail to the southern end of the Old Pickard Trust II property. In addition, there should be a fence on the West side (between the rail trail and the houses) to further suggest that the trail goes along private property deserving consideration and respect from trail users.

Each fence would have an opening with a gate for the Stone Root residents to access their land, and the gates would be clearly marked as private property. These signs would also indicate danger of steep banks, no trespassing, fragile priority habitat and the availability of public access to the White Pond Reservation at the southern end of the fence. Trust owners may require the installation of 3-wire fence along some edges to further reduce the illegal trespass across private land to reach town trails or access the private beach area.

In addition, the same black chain link fencing that runs along the north side of Powder Mill Road over the tunnel should be added to the south side of Powder Mill Road to limit access to the rail trail from the south side of the road. (This should be done at the time the rail trail is completed to Powder Mill Road, regardless of whether it continues past White Pond at that time as the banks are steep here and ripe for injury potential for folks scrambling down the hill.)

No Rest Stop near White Pond

We recommend interpretive signs (perhaps two or three etched granite signs) along the rail trail overlooking the pond, but no widening of the trail for a pullout and no rest area.

We understand the BFRTAC has discussed a rest area near White Pond. While there is an area on the right-of-way that provides an overlook of the pond at the southern end of the open area, near "the Cut" where the trail goes behind an embankment, this area is within Natural Heritage Priority Habitat for plants and is adjacent to private land. No stopping or picnicking should be permitted here. No rest area should be placed here, and no trash cans or restrooms. Trail users should be encouraged to stop, look, and then continue on the trail or access Town Land appropriately. Those who want to stay awhile and enjoy the natural beauty would be directed to leave their bikes and access the Town Land via a wooden stairway.

It has been suggested that the greater number of people on the trail will act as a deterrent to illegal use. It is important to note that neither Sachem's Cove nor the Old Pickard Trust Beach is visible from the rail trail. Thus "having more people around" will have little or no impact on illegal swimming and will open up opportunities for additional abuse of both swimming regulations, trespassing, and the increased risk of drowning by unsupervised children using the trail.

Formalize Access to Town Land from Rail Trail

It is important for the BFRTAC to understand that there is no direct access from the rail trail to Town Land. The Old Pickard property runs all the way along the rail line to the top of the hill at "The Cut". The only way to walk along the rail trail and connect to the Town-owned trails is by climbing up a steep bank. This might happen at two places: at the border with the Old Pickard Trust land, and at the closest point to the cove (near where the huge stump is chained to the signpost). Neither is appropriate for a rest area. Both would require excavation to make a trail.

We recommend construction of a wooden stairway leading up the embankment at one of these two places. This would permit people who currently have been using the walking trails to continue to do so. It would make it clear that bicycles are not permitted in the trails on Town land.

It is likely that bicycles would be parked at the bottom of the staircase, and it would not be possible to distinguish the bicycles of legitimate users from those of illegal swimmers. This might make enforcement more difficult.

Concurrent with the formalizing of access to the White Pond Reservation trails, the trails must be made ready to accept the visitors. Among the steps to mark the trails, to mark the edge of the OPFT2 land, a fence (perhaps a simple 3-wire fence such as at Walden Pond) with signage should be continued along the property line from the trail down to the pond.

Cost: We should seek volunteers and donations for the stairway. Although this would be on the railroad right-of way and might be part of the Rail Trail project, we feel this should be done now without waiting for the rail trail.

Trail End at Powder Mill Road

The WPAC strongly urges that this trail intersection not have a formal, public entrance for reasons of safety, cost, neighborhood disruption and impact to wetlands in the area adjacent to the rail bed. Additional at-grade access will be available a short distance to the south at Davis Field on Route 117 when the Sudbury section is complete.

An existing at-grade access point is already present near the Old Rifle Range at the intersection of Williams and Old Marlboro Road. Old Marlboro provides parking along the entire stretch of the farm field and more importantly, a safe travel route to the rail bed via an existing sidewalk. It is the safer, more financially responsible solution to provide additional ADA access near the Old Rifle Range area. Remember that West Concord center will provide multiple points of ADA access.

Powder Mill Road currently has "No Parking" designation in both directions leading away from the rail bed intersection. Stone Root Lane is not an option, as it is designated "No Parking" at the intersection. Additionally, Powder Mill Road has no sidewalks west of Stone Root Lane, thus requiring visitors who park legally on Old Marlboro Road to travel along a roadway with no sidewalks or to park illegally and dangerously in a narrow portion of the road to discharge visitors. Powder Mill Road has no legal parking at all in the eastern direction.

Formal ADA access at Powder Mill Road has been claimed as a requirement primarily to allow Willard school children access to the new trail and a way to school. However, no formal access way is being designed for trail access at the Sanborn school, making this argument inconsistent. As with the Sanborn school access, impromptu trails will continue to serve local citizen needs as they do today at Powder Mill Road, the Sanborn school and other locations.

Minimize Environmental Impact of Construction

As part of the planning for the Rail Trail, we recommend budgeting for the additional cost of doing this project with minimal environmental impact. Large construction equipment can damage the tree canopy and disturb the soil. This increases the possibility that invasive plant species will establish themselves along the trail. We recommend that every effort be made to use a Bobcat rather than a big bulldozer if possible. Spending a little more now might well pay off in reduced costs later for removing colonies of foreign plant species.

The construction plan should include a program to monitor invasive plant species during and after construction of the rail trail.

Water quality of White Pond near the rail trail should be tested before, during, and after construction, so that changes in transparency, phosphorus and dissolved oxygen can be tracked.

Increase Ranger Visits to Promote Proper Use

We need to double the number of Ranger visits beginning in 2008.

To help the Rangers, we suggest:

- New signage that clearly reflects a change in the enforcement policy
- Change the rules to prohibit wading and prohibit dogs in the water
- Copies of the Rules, along with White Pond features, available in a box at each entrance
- Publicity about the Concord portion of the BFRT should clearly state that swimming from Town land is prohibited.

Additional Steps Not Directly Related to the Rail Trail

Enforce Existing Parking Regulations.

We recommend that fines be issued and illegally parked cars ticketed and/or towed. If residents call to report an illegally parked car, there must be a response. Residents will initially have to be pro-active in reporting suspected illegally parked cars.

Several "No Parking" signs are missing from Powder Mill Road. Timely replacement of these signs is necessary.

If necessary, Alden Road and Anson Road could be designated as "Permit Only".

Water Quality Testing

The water quality at White Pond is tested monthly under a monitoring program managed by the Friends of White Pond. The current program relies on volunteers, both lay and professional, and includes manpower, equipment supervision, data entry and data analysis. A town-funded program is recommended.

Improve Signage to Reduce Illegal Swimming

We will pursue adding an additional sign to the six existing official signs, saying "No swimming from Town land – Enforced by Patrolling Rangers". A similar sign should be constructed at each likely entrance off the rail trail. As mentioned before, enforcement of illegal swimming might be made easier by the adoption of swimming badges.

Although it is not very visible during this high water period, the cove is "cut off" from the main pond by a sand bar. During medium to low water periods the sand bar limits the exchange of water with the main pond thus partially trapping contaminants in the cove. This makes it an inherently more vulnerable swimming area, and is one of the reasons

why the Town decided not to pursue it as a swimming area when the land was originally purchased from Sperry/Unisys.

Trail Maintenance, Use, and Signage

The community will work with the Division of Natural Resources to close off the ad hoc trails that are increasing erosion. Official trails should be clearly marked with logs to direct travel onto these trails. Along with patrols, well-marked trails with educational signage should help educate and direct visitors to areas that are appropriate to visit, and away from those that are not.

Additional Rules for the Reservation.

We are considering a few additional rules:

- Fisherman may be asked to show their fishing license if wading in the water. (If
 we require either a beach badge or formal license, it will be easier to enforce no
 swimming; wading is equal to swimming and would be prohibited except by
 possession of badge or license.)
- Dogs should not be in the beach area or in the water at any time. Either dogs must be on leashes or no dogs allowed.
- No horses within 100 feet of the pond.
- Bicycle riding should be prohibited from all trails in the Reservation.
- No boat or float launching from Town land. This is only allowed at the designated launch ramp adjacent to the Association Beach.

Informational Brochure Describing Features and Rules

A single-sheet leaflet will encourage appropriate use of the area, such as fishing, boating, hiking, wildlife viewing, and it will list the rules of the area. It will show the marked trails in the Conservation Land. The brochures would be available online, and in a box at each entrance to the Conservation Land.